

ABSTRACT

A non-Cu-based cast Al alloy contains substantially no Cu, and has a tensile strength of 305 MPa or more, a 0.2% yield strength of 220 MPa or more, and an elongation of 10% or more. In the heat treatment of the cast Al alloy, the solution treatment is performed using a fluidized bed 18, and the solution treatment is performed by rapid heating up to the solution treatment temperature in 30 minutes, and maintaining the solution treatment temperature in 3 hours or less. Because this method for heat treatment performs solution treatment at an increased speed of heating-up time, with small deviation of temperature, and at a higher temperature, total time for heat treatment can be shortened drastically in comparison with the conventional method. A non-Cu-based cast Al alloy having well-balanced mechanical properties of tensile strength, yield strength, and elongation can be provided.